

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/801,968

DATE: 07/19/2001

TIME: 15:58:46

Input Set : A:\40901.app.txt

Output Set: N:\CRF3\07192001\I801968.raw

ENTERED

4 <110> APPLICANT: Itoh, Nobuyuki
 5 Kavanaugh, W. Michael
 8 <120> TITLE OF INVENTION: HUMAN FGF-23 GENE AND GENE EXPRESSION
 9 PRODUCTS
 12 <130> FILE REFERENCE: PP-17150.001/201130.40901
 15 <140> CURRENT APPLICATION NUMBER: 09/801,968
 16 <141> CURRENT FILING DATE: 2001-03-07
 19 <160> NUMBER OF SEQ ID NOS: 46
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 756
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Mus musculus
 28 <400> SEQUENCE: 1
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 30 actgcttagag cctatccaga cacttccca ttgctggct ccaactgggg aagctgacc 120
 31 caccgttaca cggctacagc caggaccagc tatcacctac agatccatag ggatggtcat 180
 32 gtagatggca ccccccata gaccatctac agtgcctga tgattacatc agaggacgcc 240
 33 ggctctgtgg tgataaacagg agccatgact cgaaggttcc tttgtatgga tctccacggc 300
 34 aacatttttg gatcgcttca ctcagccca gagaattgca agttccgcca gtggacgctg 360
 35 gagaatggct atgacgtcta ctgtcgca aagcatcaact acctggtag cctggccgc 420
 36 gccaagcgca ttttccagcc gggcaccaac ccccccct tctcccgatt cctggctcgc 480
 37 aggaacgagg tcccgctgct gcacttctac actgttcgccc cacggcgcca cacgcgcagc 540
 38 gccgaggacc cacccgagcg cgaccactg aacgtgtctca agccgcggcc cccgcgcacg 600
 39 cctgtgcctg tatectgtct tcgcgagctg ccgagcgcag aggaaggtagg ccccgccagcc 660
 40 agcgatcctc tgggggtgct ggcagaggc cgtggagatg ctcgcggggg cgcgggaggc 720
 41 gcggataggt gtcgcccctt tcccaaggttc gtctag 756
 43 <210> SEQ ID NO: 2
 44 <211> LENGTH: 251
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Mus musculus
 48 <400> SEQUENCE: 2
 49 Met Leu Gly Thr Cys Leu Arg Leu Leu Val Gly Val Leu Cys Thr Val
 50 1 5 10 15
 51 Cys Ser Leu Gly Thr Ala Arg Ala Tyr Pro Asp Thr Ser Pro Leu Leu
 52 20 25 30
 53 Gly Ser Asn Trp Gly Ser Leu Thr His Leu Tyr Thr Ala Thr Ala Arg
 54 35 40 45
 55 Thr Ser Tyr His Leu Gln Ile His Arg Asp Gly His Val Asp Gly Thr
 56 50 55 60
 57 Pro His Gln Thr Ile Tyr Ser Ala Leu Met Ile Thr Ser Glu Asp Ala
 58 65 70 75 80
 59 Gly Ser Val Val Ile Thr Gly Ala Met Thr Arg Arg Phe Leu Cys Met
 60 85 90 95
 61 Asp Leu His Gly Asn Ile Phe Gly Ser Leu His Phe Ser Pro Glu Asn
 62 100 105 110
 63 Cys Lys Phe Arg Gln Trp Thr Leu Glu Asn Gly Tyr Asp Val Tyr Leu

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64	115	120	125	
65	Ser Gln Lys His His Tyr Leu Val Ser Leu Gly Arg Ala Lys Arg Ile			
66	130	135	140	
67	Phe Gln Pro Gly Thr Asn Pro Pro Pro Phe Ser Gln Phe Leu Ala Arg			
68	145	150	155	160
69	Arg Asn Glu Val Pro Leu Leu His Phe Tyr Thr Val Arg Pro Arg Arg			
70	165	170	175	
71	His Thr Arg Ser Ala Glu Asp Pro Pro Glu Arg Asp Pro Leu Asn Val			
72	180	185	190	
73	Leu Lys Pro Arg Pro Arg Ala Thr Pro Val Pro Val Ser Cys Ser Arg			
74	195	200	205	
75	Glu Leu Pro Ser Ala Glu Glu Gly Gly Pro Ala Ala Ser Asp Pro Leu			
76	210	215	220	
77	Gly Val Leu Arg Arg Gly Arg Gly Asp Ala Arg Gly Gly Ala Gly Gly			
78	225	230	235	240
79	Ala Asp Arg Cys Arg Pro Phe Pro Arg Phe Val			
80	245	250		
82	<210> SEQ ID NO: 3			
83	<211> LENGTH: 756			
84	<212> TYPE: DNA			
85	<213> ORGANISM: Homo sapiens			
87	<400> SEQUENCE: 3			
88	atgttggggg cccgccttcag gctctgggtc tgcctttgt gcagcgtctg cagcatgagc	60		
89	gtcctcagag cctatccaa tgcctccca ctgctcggt ccagctgggg tggcctgatc	120		
90	cacctgtaca cagccacacgc caggaacacgc taccacctgc agatccacaa gaatggccat	180		
91	gtggatggcg caccatca gaccatctac agtgcctga tgatcagatc agaggatgct	240		
92	ggcttgggg tgattacagg tgcgtatggc agaagatacc tctgcattgg tttcagggc	300		
93	aacattttg gatcacacta ttgcgaccgc gagaactgca gttccaaca ccagacgctg	360		
94	gaaaacgggt acgacgtcta ccacttcct cagtatcaact tcctggtcag tctggccgg	420		
95	gcgaagagag cttccctgac aggcataac ccacccgt actcccaatt cctgtccgg	480		
96	aggaacgaga tccccctaat tcacttcaac acccccatac cacggcggca caccggagc	540		
97	gccgaggacg actcggagcg ggacccctgt aacgtgctga agccccggc ccggatgacc	600		
98	ccggccccgg cttcccttgc acaggagctc ccgagcgcgg aggacaacag cccatggcc	660		
99	agtgacccat taggggtgtt cagggggcggt cgagtgaaca cgacgctgg gggAACGGGC	720		
100	ccggaaggct gcccctt cggcaagttc atctag	756		
102	<210> SEQ ID NO: 4			
103	<211> LENGTH: 251			
104	<212> TYPE: PRT			
105	<213> ORGANISM: Homo sapiens			
107	<400> SEQUENCE: 4			
108	Met Leu Gly Ala Arg Leu Arg Leu Trp Val Cys Ala Leu Cys Ser Val			
109	1 5 10 15			
110	Cys Ser Met Ser Val Leu Arg Ala Tyr Pro Asn Ala Ser Pro Leu Leu			
111	20 25 30			
112	Gly Ser Ser Trp Gly Gly Leu Ile His Leu Tyr Thr Ala Thr Ala Arg			
113	35 40 45			
114	Asn Ser Tyr His Leu Gln Ile His Lys Asn Gly His Val Asp Gly Ala			
115	50 55 60			
116	Pro His Gln Thr Ile Tyr Ser Ala Leu Met Ile Arg Ser Glu Asp Ala			

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117	65	70	75	80												
118	Gly	Phe	Val	Val	Ile	Thr	Gly	Val	Met	Ser	Arg	Arg	Tyr	Leu	Cys	Met
119									85	90					95	
120	Asp	Phe	Arg	Gly	Asn	Ile	Phe	Gly	Ser	His	Tyr	Phe	Asp	Pro	Glu	Asn
121									100	105					110	
122	Cys	Arg	Phe	Gln	His	Gln	Thr	Leu	Glu	Asn	Gly	Tyr	Asp	Val	Tyr	His
123									115	120				125		
124	Ser	Pro	Gln	Tyr	His	Phe	Leu	Val	Ser	Leu	Gly	Arg	Ala	Lys	Arg	Ala
125									130	135				140		
126	Phe	Leu	Pro	Gly	Met	Asn	Pro	Pro	Pro	Tyr	Ser	Gln	Phe	Leu	Ser	Arg
127									145	150				155		160
128	Arg	Asn	Glu	Ile	Pro	Leu	Ile	His	Phe	Asn	Thr	Pro	Ile	Pro	Arg	Arg
129									165	170				170		175
130	His	Thr	Arg	Ser	Ala	Glu	Asp	Asp	Ser	Glu	Arg	Asp	Pro	Leu	Asn	Val
131									180	185				185		190
132	Leu	Lys	Pro	Arg	Ala	Arg	Met	Thr	Pro	Ala	Pro	Ala	Ser	Cys	Ser	Gln
133									195	200				205		
134	Glu	Leu	Pro	Ser	Ala	Glu	Asp	Asn	Ser	Pro	Met	Ala	Ser	Asp	Pro	Leu
135									210	215				220		
136	Gly	Val	Val	Arg	Gly	Gly	Arg	Val	Asn	Thr	His	Ala	Gly	Gly	Thr	Gly
137									225	230				235		240
138	Pro	Glu	Gly	Cys	Arg	Pro	Phe	Ala	Lys	Phe	Ile					
139									245	250						
141	<210>	SEQ	ID	NO:	5											
142	<211>	LENGTH:	20													
143	<212>	TYPE:	DNA													
144	<213>	ORGANISM:	Artificial Sequence													
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147	<223>	OTHER INFORMATION:	Sense PCR primer													
149	<400>	SEQUENCE:	5													
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152	<210>	SEQ	ID	NO:	6											
153	<211>	LENGTH:	20													
154	<212>	TYPE:	DNA													
155	<213>	ORGANISM:	Artificial Sequence													
157	<220>	FEATURE:														
158	<223>	OTHER INFORMATION:	Antisense PCR primer													
160	<400>	SEQUENCE:	6													
161	cttccagcga	cccttagatga													20	
163	<210>	SEQ	ID	NO:	7											
164	<211>	LENGTH:	21													
165	<212>	TYPE:	DNA													
166	<213>	ORGANISM:	Artificial Sequence													
168	<220>	FEATURE:														
169	<223>	OTHER INFORMATION:	Sense primer for mouse FGF-23													
171	<400>	SEQUENCE:	7													
172	ctgatgatta	catcagagga	c												21	
174	<210>	SEQ	ID	NO:	8											
175	<211>	LENGTH:	20													

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176 <212> TYPE: DNA
 177 <213> ORGANISM: Artificial Sequence
 179 <220> FEATURE:
 180 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 182 <400> **SEQUENCE:** 8

183 caccaggttag tgatgcttct 20
 185 <210> SEQ ID NO: 9
 186 <211> LENGTH: 21
 187 <212> TYPE: DNA
 188 <213> ORGANISM: Artificial Sequence
 190 <220> FEATURE:
 191 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 193 <400> **SEQUENCE:** 9

194 atccatacaa aggaacacctc g 21
 196 <210> SEQ ID NO: 10
 197 <211> LENGTH: 27
 198 <212> TYPE: DNA
 199 <213> ORGANISM: Artificial Sequence
 201 <220> FEATURE:
 202 <223> OTHER INFORMATION: adaptor primer
 204 <400> **SEQUENCE:** 10

205 ccatcctaat acgactcact atagggc 27
 207 <210> SEQ ID NO: 11
 208 <211> LENGTH: 23
 209 <212> TYPE: DNA
 210 <213> ORGANISM: Artificial Sequence
 212 <220> FEATURE:
 213 <223> OTHER INFORMATION: adaptor primer
 215 <400> **SEQUENCE:** 11

216 actcaactata gggctcgagc ggc 23
 218 <210> SEQ ID NO: 12
 219 <211> LENGTH: 20
 220 <212> TYPE: DNA
 221 <213> ORGANISM: Artificial Sequence
 223 <220> FEATURE:
 224 <223> OTHER INFORMATION: Sense primer for mouse FGF-23.
 226 <400> **SEQUENCE:** 12

227 actcagtgcgt gtgcaatgct 20
 229 <210> SEQ ID NO: 13
 230 <211> LENGTH: 20
 231 <212> TYPE: DNA
 232 <213> ORGANISM: Artificial Sequence
 234 <220> FEATURE:
 235 <223> OTHER INFORMATION: Antisense primer for mouse FGF-23
 237 <400> **SEQUENCE:** 13

238 gaccttagacg aacctggaa 20
 240 <210> SEQ ID NO: 14
 241 <211> LENGTH: 216
 242 <212> TYPE: PRT

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Input Set : A:\40901.app.txt
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243 <213> ORGANISM: Homo sapiens
 245 <400> SEQUENCE: 14
 246 Met Arg Ser Gly Cys Val Val Val His Val Trp Ile Leu Ala Gly Leu
 247 1 5 10 15
 248 Trp Leu Ala Val Ala Gly Arg Pro Leu Ala Phe Ser Asp Ala Gly Pro
 249 20 25 30
 250 His Val His Tyr Gly Trp Gly Asp Pro Ile Arg Leu Arg His Leu Tyr
 251 35 40 45
 252 Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu Arg Ile Arg Ala
 253 50 55 60
 254 Asp Gly Val Val Asp Cys Ala Arg Gly Gln Ser Ala His Ser Leu Leu
 255 65 70 75 80
 256 Glu Ile Lys Ala Val Ala Leu Arg Thr Val Ala Ile Lys Gly Val His
 257 85 90 95
 258 Ser Val Arg Tyr Leu Cys Met Gly Ala Asp Gly Lys Met Gln Gly Leu
 259 100 105 110
 260 Leu Gln Tyr Ser Glu Glu Asp Cys Ala Phe Glu Glu Glu Ile Arg Pro
 261 115 120 125
 262 Asp Gly Tyr Asn Val Tyr Arg Ser Glu Lys His Arg Leu Pro Val Ser
 263 130 135 140
 264 Leu Ser Ser Ala Lys Gln Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu
 265 145 150 155 160
 266 Pro Leu Ser His Phe Leu Pro Met Leu Pro Met Val Pro Glu Glu Pro
 267 165 170 175
 268 Glu Asp Leu Arg Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu
 269 180 185 190
 270 Glu Thr Asp Ser Met Asp Pro Phe Gly Leu Val Thr Gly Leu Glu Ala
 271 195 200 205
 272 Val Arg Ser Pro Ser Phe Glu Lys
 273 210 215
 275 <210> SEQ ID NO: 15
 276 <211> LENGTH: 209
 277 <212> TYPE: PRT
 278 <213> ORGANISM: Homo sapiens
 280 <400> SEQUENCE: 15
 281 Met Asp Ser Asp Glu Thr Gly Phe Glu His Ser Gly Leu Trp Val Ser
 282 1 5 10 15
 283 Val Leu Ala Gly Leu Leu Leu Gly Ala Cys Gln Ala His Pro Ile Pro
 284 20 25 30
 285 Asp Ser Ser Pro Leu Leu Gln Phe Gly Gly Gln Val Arg Gln Arg Tyr
 286 35 40 45
 287 Leu Tyr Thr Asp Asp Ala Gln Gln Thr Glu Ala His Leu Glu Ile Arg
 288 50 55 60
 289 Glu Asp Gly Thr Val Gly Gly Ala Ala Asp Gln Ser Pro Glu Ser Leu
 290 65 70 75 80
 291 Leu Gln Leu Lys Ala Leu Lys Pro Gly Val Ile Gln Ile Leu Gly Val
 292 85 90 95
 293 Lys Thr Ser Arg Phe Leu Cys Gln Arg Pro Asp Gly Ala Leu Tyr Gly
 294 100 105 110

VERIFICATION SUMMARY

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